of his behaviour, he fell downstairs and was picked up with complete amnesia for the whole of his past life. Concussion was at first diagnosed, but the picture was soon seen to be essentially a hysterical one, and he was admitted to hospital after attempts at recovery of memory by persuasion had failed. Administration of nitrous oxide, using the technique described, produced a dramatic return of memory for the events preceding the fall and for the main events of his past life. Subsequent administration enabled him to recall and relive his activities during previous fugue states, which he claimed had never been recollected. Psychotherapy was then continued along orthodox lines.

Such dramatic recollections and abreactions are very pleasing at first sight, but they do not constitute the principal justification for the use of this method. An experienced and sympathetic psychiatrist can usually resolve a hysterical amnesia of this type by almost any method provided that he has won the confidence of the patient. Nitrous oxide merely provides a simple, quick, and efficient method which may be preferred on this account. Its usefulness is, however, most apparent in cases requiring difficult psychological analysis, where the time factor is even more important and where a rapid resolution of repressed conflicts is very desirable.

The second case belongs to this type. This patient presented a typical severe anxiety neurosis.

Case 2.—Mrs. A., aged 32; admitted May, 1943. Reason for referral: feelings of exhaustion and weakness; loss of weight; worry over bowels and food. The symptoms had been present to some extent for about 10 years. The immediate reason for their onset seemed simple and straightforward. She was the child of a financially poor family, and after winning a series of scholarships had had a brilliant undergraduate career at a provincial university and had come with a research scholarship to Oxford. There she found herself, both socially and intellectually, in much deeper waters, and since she had always been used to unquestioned leadership at school and at her own university she reacted with anxiety symptoms. She subsequently married a professor in her own field of work and had three children in very rapid succession. She found difficulty in living up to her husband's family, and the stresses to which she was subjected increased the anxiety symptoms so that a typical vicious circle of anxiety was created. Such a problem is often fairly readily resolved by superficial analysis combined with explanation, persuasion, and re-education. In this case, however, a deeper and much more complex set of factors were speedily uncovered. Behind the difficulties in her married life there lay a pathological emotional relationship with her father, the solution of which was essential to her recovery. Analysis was at first slow and difficult, but the repeated use of nitrous oxide inhalations produced a rapid flow of forgotten associations of a highly painful sexual character. The patient herself repeatedly asked for the apparatus during the process of free association, and learned how to use it without assistance or advice during difficult periods in the treatment. In this fashion a course of analytical psychotherapy which in the ordinary way would certainly have lasted a year was successfully concluded in six months, and the patient was then able to return home.

Comment

It seems certain, from our experience, that other methods of narco-analysis could not have achieved similar results without a far greater expenditure of time for therapist and patient. Repeated sessions under narcosis were necessary, and would have been necessary whatever narcotic was employed. One can resolve a hysterical amnesia or obtain an abreaction to a particular traumatic event in one session, but one cannot unravel the trend of events, often spread over a number of years, which go to the evolution of a problem of this type. In such a case the availability of narcosis "on tap" in the consulting-room, ready to be used at any moment in the course of analysis, is a very great advantage. Patients themselves express a strong preference for the nitrous oxide technique, and, where both have been used in a single case, access to hidden mental conflicts is fully as effective with gas as it is with a barbiturate.

Summary

The value and limitations of the method of narco-analysis in psychotherapy are briefly discussed. The intravenous injection of a barbiturate has been the method generally employed. Nitrous oxide inhalation is claimed to be fully as effective for this purpose; it is quicker, simpler, and safer, and can be used in the consulting-room at any time during the course of psychiatric treatment.

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Medical Memoranda

Large Goitre in a Child of 10

The following case history, with a photograph of the patient, may be considered worth publishing.

A girl aged 10, of miserably poor parents from Abu Tig, in Upper Egypt, came to this hospital in November, 1943. She had a history of a gradual enlargement of the neck, and general ill-health, of four years' duration. There was no complaint of dyspnoea or dysphagia.

On examination the child was seen to be wizened, anaemic, and poorly developed. Though alleged to be 10 years old she weighed only 43 lb., the average weight of a child of 6. There was a large, somewhat nodular, fairly firm bilobed mass, obviously a goitre, extending from mandible to manubrium and well beyond the sides of the neck (see photograph). The tumour was freely movable on manipulation and deglutition, and there was no stridor. A number of enlarged subcutaneous veins were observed moving in different directions over the tumour. The circumference of the neck and tumour varied from 18 to 20 inches. The child was found to be suffering from ankylostomiasis, as is usual with some 90% of Egyptian "fellahin." Her haemoglobin was only 60%, and so the ankylostomiasis and anaemia were treated before operation. She also had some dermatitis over the tumour and chest, which can be noted in the photograph; this responded quickly to simple ointments. There were no signs of thyrotoxicosis.

Operation.—As there were no facilities for intratracheal anaesthesia the patient was given 2 drachms of paraldehyde per rectum one hour and 1/200 gr. of atropine half an hour before operation. Only a very small amount of open ether was necessary after this premedication, and there was no anxiety over the airway throughout the operation. The usual "collar" incision was employed, and all but a small portion of the thyroid mass was excised. There was no difficulty apart from the number and size of the vessels, and haemorrhage was minimal. A small drain was inserted through a stab wound below the incision, being removed after 48 hours. Convalescence was rapid and uneventful, and the father insisted on removing the child some three weeks after the operation, before any great improvement in the general condition could be expected.

Examination of the Tumour.—The growth was in two parts, corresponding to the right and left lobes of the thyroid gland and parts of the isthmus. In appearance it was similar to normal thyroid tissue, but with numerous cysts, varying in size and filled with dark viscid fluid. The right-hand portion measured 6 by 2½ by 2½ in., and the left portion 5 by 2½ by 2½ in. The microscopical report stated, "The appearances are those of a papillary adenoma of the thyroid gland."

My reasons for reporting this case are the large size of the goitre, the comparative brevity of the history, and the youth of the patient. I am indebted to the pathologist and the photographer for their help.

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Varicella and Herpes Zoster: An Experiment

Observations, both clinical and experimental, have repeatedly been made which suggest the existence of a close relationship between the aetiological agents of varicella and herpes zoster. In view of this the following experiment was carried out to find whether convalescent herpes zoster serum would be effective in preventing varicella in varicella contacts. The scale of the experiment was small, but the findings are perhaps suggestive enough to justify publication.

Blood was taken from two herpes zoster patients during the second week after appearance of the eruption. After clotting, the serum was put up in ampoules and stored at a temperature of 4° C. till an opportunity arose for its use (about two months).

On May 31, 1942, varicella developed in a child of 6 years in one of the children's wards in this hospital. Of the other 19 children in the ward, 6 had a previous history of varicella. Of the 13 who had not previously had varicella, 7 were given an